

IN THE CLAIMS:

1. (Currently amended) A mammalian cell comprising:
a first recombinant gene encoding a chimeric receptor comprising an extracellular domain of a first receptor fused to a cytoplasmic domain of a second receptor capable of inducing a recombinant reporter system;
a second recombinant gene encoding a compound the expression of which creates an autocrinic or anti-autocrinic loop upon association of the compound with the chimeric receptor; and
a recombinant reporter system that is activated or inactivated upon the creation of said autocrinic or anti-autocrinic loop.
2. (Canceled).
3. (Previously presented) The mammalian cell of claim 1, wherein the chimeric receptor is a multimeric or multimerizing receptor.
4. (Previously presented) The mammalian cell of claim 1, wherein said second recombinant gene is functionally incorporated after a constitutive promoter.
5. (Currently amended) The mammalian cell of claim 1, wherein said recombinant reporter system is activated as a result of a ligand binding to said chimeric receptor.
6. (Previously presented) The mammalian cell of claim 1, wherein a cytoplasmic part of the chimeric receptor is a cytoplasmic part of at least one interferon receptor subunit.
7. (Currently amended) The mammalian cell of claim 1, wherein the recombinant reporter system comprises *E. coli* xanthine-guanine phosphoribosyl transferase (gpt).
8. (Currently amended) The mammalian cell of claim 7, wherein said recombinant reporter system is placed under control of a 6-16 reporter.

9. (Previously presented) The mammalian cell of claim 4, wherein said second recombinant gene is inserted after an SRa or HEF1a promoter.

10. (Currently amended) The mammalian cell of claim 1, wherein the mammalian cell is a 2fTGH cell.

11. (Currently amended) A method of screening for a compound that inhibits the binding of a ligand with the extracellular part of a chimeric receptor and/or inhibits the signaling pathway of the cytoplasmic part of a chimeric receptor, the method comprising:
providing the mammalian cell of claim 1;
contacting said mammalian cell with ~~said compound and~~ said ligand; and
selecting cells in which the cell's recombinant reporter system is inactivated;
~~thus screening for thereby identifying~~ the compound that inhibits the binding of the ligand with the extracellular part of the chimeric receptor and/or inhibits the signaling pathway of the cytoplasmic part of the chimeric receptor.

12-13. Canceled.

14. (Previously presented) A kit, comprising a mammalian host cell and one or more transformation vectors, which upon the transfection of said cell with said vector or vectors, results in the mammalian cell of claim 1.

15. (Currently amended) A method of screening for agonists of a chimeric receptor, the method comprising:

providing a mammalian cell comprising:

a first recombinant gene encoding a chimeric receptor comprising an extracellular domain of a first receptor fused to a cytoplasmic domain of a second receptor capable of inducing a recombinant reporter system;

a library of recombinant genes encoding at least one compound, the expression of which creates an autocrine loop;

a recombinant reporter system that is activated upon the creation of said autocrine loop; selecting cells in which the cell's recombinant reporter system is activated; and identifying the at least one compound that binds to said chimeric receptor and activated said autocrine loop;
thus thereby screening for the agonists of the chimeric receptor.

16-17. Canceled.

18. (Currently amended) The method according to claim 15, wherein said agonists are produced by the autocrine loop encoded for by the library of recombinant genes.

19-20. Canceled.

21. (Currently amended) The mammalian cell of method according to claim + 15, wherein the chimeric receptor is a multimeric or multimerizing receptor.

22. (Currently amended) The mammalian cell of method according to claim + 15, wherein said second recombinant gene is functionally incorporated after a constitutive promoter.

23. (Currently amended) The mammalian cell of method according to claim + 15, wherein said recombinant reporter system is activated as a result of a ligand binding to said chimeric receptor.

24. (Currently amended) A method of screening for antagonists of a chimeric receptor, the method comprising:

providing a mammalian cell comprising:

a first recombinant gene encoding a chimeric receptor comprising an extracellular domain of a first receptor fused to a cytoplasmic domain of a second receptor capable of inducing a recombinant reporter system;

a second recombinant gene encoding a compound, the expression of which creates an autocrine loop;

a recombinant reporter system that is activated upon the creation of said autocrine loop;
contacting the compound with said mammalian cell with a possible antagonist-chimeric receptor
in the presence of a ligand of the chimeric receptor; and
determining the ability of the compound to activate the reporter system; and
comparing the ability of the compound to activate the reporter system to a positive or a negative
control;

selecting mammalian cells in which said recombinant reporter system is inactivated;
thereby identifying the an antagonist of the chimeric receptor.

25. (Canceled)

26. (New) The mammalian cell of claim 1, wherein the cytoplasmic domain of the second receptor comprises a transmembrane and/or intracellular domain of IFNaR.

27. (New) A mammalian cell comprising:

a first recombinant gene encoding a chimeric receptor comprising an extracellular domain of a first receptor fused to a transmembrane and/or intracellular domain of IFNaR of a second receptor capable of inducing an *E. coli* xanthine-guanine phosphoribosyl transferase system;

a second recombinant gene encoding a compound the expression of which creates an autocrine or anti-autocrine loop upon association of the compound with the chimeric receptor, said second recombinant gene being functionally incorporated after a constitutive promoter; and

an *E. coli* xanthine-guanine phosphoribosyl transferase reporter system that is activated or inactivated upon the creation of the autocrine or anti-autocrine loop, said *E. coli* xanthine-guanine phosphoribosyl transferase reporter system being placed under control of a 6-16 promoter.